

PATENT
APPLICATION 09/822,300
ATTORNEY DOCKET 2000P07515US01 (1009-087)

REMARKS

Applicant respectfully thanks the Examiner for the consideration provided to this application, and respectfully requests reconsideration of this application.

Claim 53 has been added.

Claims 1-53 are now pending in this application. Each of claims 1, 19, 36, 39, 41, 44, 51, and 53 is in independent form.

I. The Objections to the Claims

Regarding claim 51, the Office Action dated 14 August 2007 ("the present Office Action") asserts, at Page 2:

the newly added phrase recited as 'a set of markup language tags associated with the markup language version of the industrial automation computer program defined for the graphical programming language, the set of markup language tags one of a plurality of sets of markup language tags, each set of markup language tags of the plurality of sets of markup language tags defined for a corresponding graphical language of a plurality of graphical languages used in industrial automation' appears to be improperly constructed with no relationship to the rest of the semantic and syntactic context of the pertinent paragraph, and is marred with fragments of sentences without any conjugated verb action, which in all appears convoluted, virtually idiomatic, hard-to-understand an English expression.

Applicant respectfully traverses this objection as having no factual or legal basis. Applicant respectfully notes that no evidence is presented that claim 51 does not comply with the statutory requirements of 35 U.S.C. 112, any aspect of MPEP 608.01, or any other legal standard. Absent a legal or factual basis, the unfounded assertions of the present Office Action regarding claim 51 cannot form a basis for an objection to claim 51. Reconsideration and withdrawal of the objection to claim 51 is respectfully requested.

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II. The Indefiniteness Rejections

Each of claims 36-38, 51, and 52 was rejected under 35 U.S.C. 112, second paragraph, as being indefinite. These rejections are respectfully traversed.

Regarding indefiniteness rejections, the Federal Circuit has held that the law is clear that **if the claims, read in light of the specification, reasonably apprise those skilled in the art of the use and scope of the invention**, and if the language is as precise as the subject matter permits, the claims are definite under Section 112, second paragraph. *Shatterproof Glass Corp. v. Libbey-Owens Ford Co.*, 758 F.2d 613, 624, 225 USPQ 634 (Fed. Cir. 1985), *cert. dismissed*, 474 U.S. 976 (1985).

The Federal Circuit held that it is an Applicant's province to choose language to define and claim subject matter. *See, Marley Mouldings, Ltd. v. Mikron Indus.*, 417 F.3d 1356, 75 USPQ2d 1954 (Fed. Cir. 2005); *see also, In re Chandler*, 319 F.2d 211, 225 (CCPA 1963) (a patentee's "freedom of choice" in selecting the means to point out and define the invention "should not be abridged").

In software cases, algorithms in the specification need only disclose adequate defining structure to **render the bounds of the claim understandable to one of ordinary skill in the art**. *See, e.g., Med. Instrumentation and Diagnostics Corp. v. Elekta AB*, 344 F.3d 1205, 1214 (Fed. Cir. 2003) ("[H]ere there would be no need for a disclosure of the specific program code if software were linked to the converting function and one skilled in the art would know the kind of program to use."); *see also Intel Corp. v. VIA Techs., Inc.*, 319 F.3d 1357, 1366 (Fed. Cir. 2003) (holding that the **internal circuitry of an electronic device need not be disclosed in the specification if one of ordinary skill in the art would understand how to build and modify the device**).

Applicant has chosen language for each of claims 36-38, 51, and 52, as is Applicant's province under *Marley* and *In re Chandler*. The present Office Action fails to present any evidence that any of claims 36-38, 51, and 52, when read in light of the specification, do not reasonably apprise those skilled in the art of the use and scope of the claimed subject matter. Moreover, the present Office Action fails to provide evidence regarding a level of skill of one having ordinary skill in the art. Most significantly, the present Office Action fails to present evidence that the defining structure of the claims would not render the bounds of the claim

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understandable to one of ordinary skill in the art or that one of ordinary skill in the art would not understand how to implement the claimed subject matter. Instead, the present Office Action merely makes numerous unfounded assertions.

For example, at Page 3 the present Office Action alleges that claim 36 is "incomplete for omitting essential elements and/or cooperative relationships of elements that reasonably convey the realization of the 'to control' limitation, such omission amounting to a gap between the necessary structural connections". Applicant respectfully submits that no evidence is of record that any elements alleged to be omitted from claim 36 are stated in the present application or otherwise evidenced as "essential" to claim 36 or that any allegedly omitted elements would not be known to one of ordinary skill in the art.

The present Office Action also erroneously asserts, at Pages 3 and 4:

the very broad terminology recited as 'to control' is considered not a specific limitation but rather a concept/limitation that covers a large range of actions. Indeed, a broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by 'such as' and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 36 recites the broad recitation 'program ... causing a programmable logic controller to control a industrial process', and the claim also recites 'computer program developed via a markup language version of the ... computer program' which is the narrower statement of the range/limitation. One of ordinary skill in the art would not be

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taught how a program developed via a markup version thereof can enable this very program to cause a industrial controller to control an industrial process, which appears to be a very broad endeavor in the absence of any more specifics. For example, it is indefinite as to how a markup construct can enable a program to cause a PLC to control an industrial process.

Applicant respectfully submits that this assertion is both legally and factually erroneous. As an initial matter, MPEP 2173.05(c) is completely inapposite since that section of the MPEP deals with "numerical ranges and amounts limitations". None of claims 36-38, 51, and 52 comprise "numerical ranges" or "amounts limitations". Further, none of the cases cited by the present Office Action either state or support the broadly stated and apparently erroneous premise that "a broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired". Instead, this premise appears to have been created out of thin air with no substantive support whatsoever. For example, in the case of *Ex parte Wu*, 10 USPQ2d 2031, 2033 (BPAI 1989), the Board actually found that a claim that utilized the word "optionally" was not indefinite because the Board had "no difficulty determining the scope of claim 1 as drafted". *Id.*

In the case of *Ex parte Steigewald*, 131 USPQ 74 (BPAI 1961) the Board held a number of claims to be indefinite because of "the examiner's objection to the language bridging pages 10 and 11 of the specification which does not form a complete sentence", "that one skilled in the art would know what is intended by the explanation inserted in page 11 that the emulsifier would be 'set free' under agitation", and "various trade names throughout the description and in the claims without precise identification of the composition thereof at the time of filing this application renders the disclosure and claims vague and indefinite". Notably, the present Office Action fails to provide any evidence that the holding of *Ex parte Steigewald* is apposite in any form to Applicant's disclosure and any of claims 36-38, 51, and 52. Moreover, an opinion of the Board of Patent Appeals and Interferences that was rendered over 45 years ago is not valid law to the extent that subsequent decisions of the Federal Circuit, as cited *supra*, differ therefrom.

In the case of *Ex parte Hall*, 83 USPQ 38 (BPAI 1948) the Board held a number of claims to be indefinite because of "[e]xpressions like 'such as urea formaldehyde glue' or

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'mineral wool such as rock wool or asbestos'" were found to be indefinite. The present Office Action fails to present any evidence that Applicant uses the phrase "such as" in any of claims 36-38, 51, and 52. Consequently, the present Office Action fails to provide any evidence that the holding of *Ex parte Hall* is apposite in any form to Applicant's disclosure and any of claims 36-38, 51, and 52. Moreover, an opinion of the Board of Patent Appeals and Interferences that was rendered nearly 60 years ago is not valid law to the extent that subsequent decisions of the Federal Circuit, as cited *supra*, differ therefrom.

In the case of *Ex parte Hasche*, 86 USPQ 481 (BPAI 1949) the Board held a number of claims to be indefinite because "such expressions as 'which may be,' [and] 'such, for example as'" did not "present a proper definition of [] starting materials". The present Office Action fails to present any evidence that Applicant uses the phrase "which may be" or "such, for example as" in any of claims 36-38, 51, and 52. Consequently, present Office Action fails to provide any evidence that the holding of *Ex parte Hasche* is apposite in any form to Applicant's disclosure and any of claims 36-38, 51, and 52. Moreover, an opinion of the Board of Patent Appeals and Interferences that was rendered nearly 60 years ago is not valid law to the extent that subsequent decisions of the Federal Circuit, as cited *supra*, differ therefrom.

Applicant respectfully reiterates that even if the cases cited by the present Office Action were valid law, a premise which Applicant respectfully traverses, no evidence is of record that any of the claimed phrases found indefinite in those cases appears in any of claims 36-38, 51, and 52. Applicant particularly reiterates that no support is found in the cited cases of the present Office Action that supports the broad and clearly erroneous premise of the present Office Action that "a broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired".

Applicant further reiterates that no evidence of record indicates that any of claims 36-38, 51, and 52, when read in light of the specification, do not reasonably apprise those skilled in the art of the use and scope of the claimed subject matter. Thus, no *prima facie* case has been made that any of claims 36-38, 51, and 52 are indefinite.

Included herewith is a Declaration under 37 C.F.R. § 1.132 of Georg Muenzel, one skilled in the art of electrical engineering as of 24 March 2000, the priority date claimed by the

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present application. Paragraphs 12-18 of Mr. Muenzel's Declaration provide evidence that one skilled in the art would have found that each of claims 36-38, when read in light of the specification, reasonably apprise those skilled in the art of the use and scope of the claimed subject matter and that the language of each of claims 36-38 is as precise as the subject matter of each of claims 36-38 permits.

Paragraphs 19-24 of Mr. Muenzel's Declaration provide evidence that one skilled in the art would have found that each of claims 51 and 52 when read in light of the specification, reasonably apprise those skilled in the art of the use and scope of the claimed subject matter and that the language of each of claims 51 and 52 is as precise as the subject matter of each of claims 51 and 52 permits.

For at least these reasons, Applicant respectfully requests that each rejection of claims 36-38, 51, and 52 under 35 USC 112 be withdrawn.

III. The Obviousness Rejections

Each of claims 1-52 was rejected under 35 U.S.C. 103(a) as being unpatentable over various combinations of U.S. Patent 6,634,008 ("Dole"), and/or U.S. Patent 7,089,530 ("Darkinski"). Each of these rejections is respectfully traversed.

A. Legal Standards

1. *Prima Facie* Criteria for an Obviousness Rejection

Over 40 years ago, in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), the Supreme Court established factors regarding the factual inquiry required to establish obviousness. The factors include:

1. determining the scope and contents of the prior art;
2. ascertaining differences between the prior art and the claims at issue;
3. resolving the level of ordinary skill in the pertinent art; and
4. considering objective evidence indicating obviousness or nonobviousness.

The Federal Circuit has applied *Graham*'s required factual inquiry in numerous legal precedents that are binding on the USPTO.

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It is recognized that most patentable inventions arise from a combination of old elements and often, each element is found in the prior art. *In re Rouffet*, 149 F.3d 1350, 1357 (Fed. Cir. 1998). The United States Supreme Court clarified the obviousness inquiry criteria in *KSR International Co. v. Teleflex Inc.*, 2007 U.S. LEXIS 4745 (2007). The KSR Court held:

1. "[t]he question is not whether the combination was obvious to the patentee but whether the combination was obvious to a person with ordinary skill in the art";
2. "a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art";
3. it is necessary "to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit"; and
4. "[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness" (*quoting In re Kahn*, 441 F. 3d 977, 988 (Fed. Cir. 2006)).

In order to establish a *prima facie* case of obviousness, certain criteria must be met. Evidence must be provided that indicates that the combination was obvious to a person with ordinary skill in the art. *KSR International Co. v. Teleflex Inc.*, 2007 U.S. LEXIS 4745 (2007); *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). The evidence must include an apparent reason, with a rational underpinning, to combine the known elements in the fashion claimed in the patent at issue. *KSR International Co. v. Teleflex Inc.*, 2007 U.S. LEXIS 4745 (2007). There must be a reasonable expectation of success. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991); MPEP 2143. In addition, the prior art reference (or references when combined) must teach... all the claim limitations. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991); MPEP 2143.

Moreover, the "Patent Office has the initial duty of supplying the factual basis for its rejection." *In re Warner*, 379 F.2d 1011, 154 USPQ 173, 178 (CCPA 1967), cert. denied, 389 U.S. 1057, *reh'g denied*, 390 U.S. 1000 (1968). "It may not... resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in its factual basis". *Id.*

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It is legal error to “substitute[] supposed *per se* rules for the particularized inquiry required by section 103. It necessarily produces erroneous results.” *See, In re Ochiai*, 71 F.3d 1565, 1571, 37 USPQ2d 1127, 1132-33 (Fed. Cir. 1998); *In re Wright*, 343 F.2d 761, 769-770, 145 USPQ 182, 190 (CCPA 1965).

“Once the examiner... carries the burden of making out a *prima facie* case of unpatentability, ‘the burden of coming forward with evidence or argument shifts to the applicant.’” *In re Alton*, 76 F.3d 1168, 37 USPQ2d 1578 (Fed. Cir. 1996) (*quoting In re Oetiker*, 977 F.2d at 1445, 24 USPQ2d at 1444).

2. Allegedly “Admitted Prior Art”

According to the Federal Circuit “[o]ne’s own work may **not** be considered prior art in the absence of a statutory basis”. *Riverwood International Corp. v. R. A. Jones & Co., Inc.*, 324 F.3d 1346, 66 USPQ2d 1331 (Fed. Cir. 2003).

3. All Words in a Claim Must Be Considered

“To establish *prima facie* obviousness..., ‘[a]ll words in a claim must be considered’”. MPEP 2143.03, *quoting In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970); *see also, In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974); *In re Wilder*, 429 F.2d 447, 166 USPQ 545, 548 (CCPA 1970); *In re Angstadt*, 537 F.2d 498, 190 USPQ 214, 217 (CCPA 1976); *In re Geerdes*, 491 F.2d 1260, 180 USPQ 789, 791 (CCPA 1974).

4. Official Notice

Regarding Official Notice, MPEP § 2144.03.A states (emphasis added):

[i]t would not be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of **instant and unquestionable demonstration as being well-known**. For example, assertions of... specific knowledge of the prior art must always be supported by citation to some reference work recognized as standard in the pertinent art. *In re Ahlert*, 424 F.2d at 1091, 165 USPQ at 420-21. *See also In re Grose*, 592 F.2d 1161, 1167-68, 201 USPQ 57, 63 (CCPA 1979).

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Further, if an applicant traverses the examiner's assertion of Official Notice, the examiner **must provide documentary evidence** in the next Office Action if the rejection is to be maintained. *See* 37 CFR 1.104(c)(2) and MPEP 2144.03C. *See also In re Zurko*, 258 F.3d 1379, 1386, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001) (“[T]he Board cannot simply reach conclusions based on its own understanding or experience, or on its assessment of what would be basic knowledge or common sense. Rather, the Board must point to some concrete evidence in the record in support of these findings.”).

A bald assertion of knowledge generally available to one of ordinary skill in the art to bridge the evidentiary gap is improper. Such unfounded assertions are not permissible substitutes for evidence. *See In re Lee*, 277 F.3d 1338, 1435, 61 USPQ2d 1430, 1435 (Fed. Cir. 2002). That is, deficiencies of the cited references can not be remedied by general conclusions about what is basic knowledge or common sense to one of ordinary skill in the art. *In re Zurko*, 258 F.3d 1379, 1385-86 (Fed. Cir. 2001). An assessment of basic knowledge and common sense that is not based on any evidence in the record lacks substantial evidence support. *Id.*

Thus, to the extent that Official Notice is explicitly or implicitly utilized to support any rejection, such as the rejection of any of claims 1-28, each such rejection is respectfully traversed and citation and provision of a reference that supports the rejection is respectfully requested.

5. Unfounded Assertions of Knowledge

A bald assertion of knowledge generally available to one of ordinary skill in the art to bridge the evidentiary gap is improper. Such unfounded assertions are not permissible substitutes for evidence. *See, In re Lee*, 277 F.3d 1338, 1435, 61 USPQ2d 1430, 1435 (Fed. Cir. 2002). That is, deficiencies of the cited references can not be remedied by general conclusions about what is basic knowledge or common sense to one of ordinary skill in the art. *In re Zurko*, 258 F.3d 1379, 1385-86 (Fed. Cir. 2001).

6. Inherency

Inherency “requires that the missing descriptive material is necessarily present, not merely probably or possibly present, in the prior art.” *Trintec Incls., Inc. v. Top-U.S.A. Corp.*,

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295 F.3d 1292, 1295, 63 USPQ2d 1597, 1599 (Fed. Cir. 2002).

7. Interpreting "adapted"

The predecessor court to the Federal Circuit has interpreted the phrase "adapted" as preceding a "structural limitation". See, *In re Venezia*, 530 F.2d 956 (CCPA 1976). Claim limitations preceded by "adapted" have been considered sufficiently definite. See MPEP 2173.05(g).

In addition, the Federal Circuit has interpreted the word "adapted" as preceding "functional language [that] limits the scope of these claims to devices that have the capability of" performing the stated function. See, *R.A.C.C. Indus., Inc. v. Stun-Tech, Inc.*, 178 F.3d 1309, 49 USPQ2d 1793 (Fed. Cir. 1998) (*cert. denied*, 526 U.S. 1098 (1999)) (cited with approval by MPEP 2106.IV.B). Because such functional language serves as a claim limitation, a reference cited to support a rejection of a claim must describe a structure(s) capable of performing each claimed function preceded by the term "adapted."

Further, in the case of *In re Land*, the CCPA ruled on a relevant claim that stated "said color-providing substances associated with at least the inner photosensitive emulsion layers are *adapted to be rendered diffusible* in said liquid composition *only after at least substantial development* of the next outermost photosensitive ... layer has occurred." See, *In re Land*, 368 F.2d 866, 151 USPQ 621, 635 (CCPA 1966). The CCPA noted that the italicized portions of the claim were functional and held the claim patentable in view of the **functional limitations**.

In yet another case, the Federal Circuit reversed an Examiner's rejection of a patent claim due to the Examiner's failure to provide patentable weight to **functional limitations**. See, *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).

In still another case the Federal Circuit found limitations preceded by the phrase "adapted to be definite" in the case of *Aero Prods., Inc. v. Intex Rec. Corp.*, 466 F.3d 1000, 1016 (Fed. Cir. 2006), which stated:

[f]inally, ACS suggests that the patent's Claim 13 and its dependent claims are invalid for indefiniteness, since they describe a solution that is "adapted to be diluted." We do not read that phrase as possessing any significant ambiguity, much less intractable ambiguity making the claim "not amenable to construction," which is

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the requirement to demonstrate indefiniteness.

8. Pertinent Prior Art References

The *Graham* analysis requires that, to rely on a prior art reference as a basis for a rejection, the USPTO must show that the reference is “reasonably pertinent to the particular problem with which the invention was involved.” *Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 664, 57 USPQ2d 1161, 1166 (Fed. Cir. 2000); *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1535, 218 USPQ 871, 876 (Fed. Cir. 1983); *In re Deminski*, 796 F.2d 436, 230 USPQ 313 (Fed. Cir. 1986); *In re Oetiker*, 977 F.2d 1443, 1447 (Fed. Cir. 1992); *In re Kahn*, 441 F.3d 977 (Fed. Cir. 2006).

“References are selected as being reasonably pertinent to the problem based on the judgment of a person having ordinary skill in the art.” *In re Kahn*, 441 F.3d 977 (Fed. Cir. 2006) (“[I]t is necessary to consider ‘the reality of the circumstances,’—in other words, common sense—in deciding in which fields a person of ordinary skill would reasonably be expected to look for a solution to the problem facing the inventor” (quoting *In re Wood*, 599 F.2d 1032, 1036 (C.C.P.A. 1979))).

“If a reference disclosure has the same purpose as the claimed invention, the reference relates to the same problem, and that fact supports use of that reference in an obviousness rejection. An inventor may well have been motivated to consider the reference when making his invention. If it is directed to a different purpose, the inventor would accordingly have had less motivation or occasion to consider it.” *In re Kahn*, 441 F.3d 977 (Fed. Cir. 2006) (citing *In re Clay*, 966 F.2d 656, 659-60 (Fed. Cir. 1992)).

Yet “[d]efining the problem in terms of its solution reveals improper hindsight in the selection of the prior art relevant to obviousness.” *In re Kahn*, 441 F.3d 977 (Fed. Cir. 2006) (quoting *Ecolchem, Inc. v. S. Cal. Edison Co.*, 227 F.3d 1361, 1372 (Fed. Cir. 2000)).

9. Lack of Evidence of Reasons for Combining References

Under the *Graham* analysis, the “examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness.” MPEP 2142. The requirements for meeting this burden are clear.

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To factually support a *prima facie* conclusion of obviousness, an Office Action must provide evidence that indicates that the combination was obvious to a person with ordinary skill in the art. The evidence must include an apparent reason, with a rational underpinning, to combine the known elements in the fashion claimed in the patent at issue. "rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness" *KSR International Co. v. Teleflex Inc.*, 2007 U.S. LEXIS 4745 (2007) (quoting *In re Kahn*, 441 F. 3d 977, 988 (Fed. Cir. 2006)).

10. Next Office Action

If an Office Action fails to set forth sufficient facts to provide a *prima facie* basis for the rejections, any future rejection based on the applied reference will necessarily be factually based on an entirely different portion of that reference, and thus will be legally defined as a "new grounds of rejection." Consequently, any Office Action containing such rejection can not properly be made final. See, *In re Wiechert*, 152 USPQ 247, 251-52 (CCPA 1967) (defining "new ground of rejection" and requiring that "when a rejection is factually based on an entirely different portion of an existing reference the appellant should be afforded an opportunity to make a showing of unobviousness vis-a-vis such portion of the reference"), and *In re Warner*, 379 F.2d 1011, 154 USPQ 173, 178 (CCPA 1967) (the USPTO "has the initial duty of supplying the factual basis for its rejection").

B. Analysis

1. All Claims

1. Allegedly Admitted Prior Art

Applicant has not admitted, and does **not** admit; that the applied portions of Applicant's own disclosure are prior art in the present application. The "Background" section represents subject matter "known" to Applicant. The mere fact that subject matter is "known" to an applicant does not expressly or impliedly suggest that the subject matter is prior art. An applicant's own work can be "known" to an applicant without necessarily qualifying as prior art. Thus, since Applicant has **not** admitted that the Background section of the present application is

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prior art, it is improper for the Office Action to apply, or attempt to apply, portions of that Background section in a claim rejection under 35 U.S.C. 103(a).

In response to this previously presented and persuasive argument, the present Office Action asserts, at Page 19:

Applicant has submitted that there has been no admittance of prior art in the BACKGROUND (Appl. Rmrks, pg, 24, bottom). Not until it is explicitly explained in the BACKGROUND that any identified prior art (or APA) subject matter therein is also part of the inventor's patent-seeking work, subject matter in the BACKGROUND will not be given any merits in terms of patentability; because patent-seeking invention is based from past failures or a need expressed in the background arts or technological approaches, and should not include this background teaching unless (emphasis added) explicitly stated so; and even if it did, another form impropriety would have occurred.

To the extent that Applicant understands these substantially incomprehensible assertions; Applicant respectfully traverses same as being erroneous. Applicant respectfully submits that no legal foundation is of record upon which these assertions can be based. Aspirational desires regarding the scope and/or content of the Background section are irrelevant regarding whether Applicant's own disclosure can be used as a reference upon which a rejection is based.

Applicant reiterates that "[o]ne's own work may **not** be considered prior art in the absence of a statutory basis". *Riverwood International Corp. v. R. A. Jones & Co., Inc.*, 324 F.3d 1346, 66 USPQ2d 1331 (Fed. Cir. 2003). Yet the present Office Action continues to impermissibly rely upon Applicant's own disclosure in support of the rejections of each of claims 1-52. For at least these reasons, reconsideration and withdrawal of each rejection of each of claims 1-52 is respectfully requested.

2. Dole is Not Pertinent Art

The present Office Action fails to even identify "the particular problem" the claimed subject matter is involved and notably fails to provide any evidence that Dole is "reasonably pertinent to the problem based on the judgment of a person having ordinary skill in the art."

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The present Application states that the field of the invention is “graphical programming languages for programmable logic controllers. In particular, the invention concerns a method and system for standardized storage of graphical programming languages.” See Page 1. By contrast, Dole allegedly recites, at the Abstract:

[a]n environment for **designing integrated circuits**. Computers include browsers for displaying pages of forms, with the computers in communication with a methodology server and a compute server. The methodology server contains design methodologies accessed by the computers, with the design methodologies defining steps of designing and testing of integrated circuits. The computers or methodology server are also in communication with a compute server. The compute server executes electronic design automation tools as requested.

Thus, Dole relates to designing and testing “integrated circuits”.

The present Office Action presents no evidence that Dole is “reasonably pertinent to the problem based on the judgment of a person having ordinary skill in the art.”

Paragraphs 25-27 of Mr. Muenzel’s Declaration provide evidence that one skilled in the art would have not have found “[a]n environment for designing integrated circuits” to be reasonably pertinent to any problem related to the claimed subject matter, and in particular not to any disclosed problems associated with a method and system for standardized storage of graphical programming languages.

Applicant respectfully submits that, at least in view of this evidence, Dole cannot be used as a reference in a *prima facie* rejection of any of claims 1-52.

1. Claim 1

Claim 1, from which each of claims 2-18 ultimately depends, recites, *inter alia*, yet no substantial evidence of record has been presented that any of the applied portions of the relied-upon references teach, “**converting the internal representation to a markup language version of the industrial automation computer program**”.

The present Office Action relies upon “col. 7, lines 26-42; Fig. 10; ... col. 16, lines 10-47; Fig. 13” of Dole as allegedly teaching this claimed subject matter.

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Paragraphs 28-46 of Mr. Muenzel's Declaration provide evidence that the applied portions of Dole do not teach, "converting the internal representation to a markup language version of the industrial automation computer program" as claimed by claim 1.

The applied portions of the remaining applied portions of the relied-upon references do not overcome at least these deficiencies of Dole.

Thus, even if there were evidence of obviousness (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), the applied portions of the references relied upon in the Office Action, **as attempted to be modified and/or combined**, still do not expressly or inherently teach every limitation of the independent claims, and consequently fail to establish a *prima facie* case of obviousness. Consequently, for at least the reasons mentioned above, reconsideration and withdrawal of these rejections is respectfully requested.

Moreover, Applicant respectfully submits that the present Office Action fails to properly address the Graham factors by at least failing to determine the scope and contents of the prior art; resolve the level of ordinary skill in the pertinent art; and consider objective evidence indicating obviousness or nonobviousness.

For at least these reasons, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 1. For at least these reasons, Applicant respectfully requests a withdrawal of the rejection of claim 1. A withdrawal of each rejection of each of claims 2-18, each of which ultimately depends from claim 1 is also respectfully requested.

2. Claim 5

Claim 5 recites, yet the present Office Action **fails to allege** that any of the applied portions of the relied-upon references teaches, "representing the retrieved industrial automation computer program as a corresponding graphical programming language version on a computer display." The present Office Action fails to substantively respond to this persuasive argument and again fails to provide any evidence of obviousness regarding claim 5.

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Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 5. For at least these reasons, Applicant respectfully requests a withdrawal of the rejection of claim 5.

3. Claim 17

Claim 17 states, *inter alia*, yet the present Office Action fails to allege that any applied portion of any relied upon reference teaches, "retrieving the markup language version of the industrial automation computer program from the computer data storage device and representing the retrieved industrial automation computer program as a corresponding graphical programming language version on a computer display." Since claim 17 ultimately depends from claim 1, the "industrial automation computer program" is "adapted for controlling a programmable logic controller". The applied portions of Dole do not teach, "industrial automation computer program" that is "adapted for controlling a programmable logic controller" and thus cannot teach "retrieving the markup language version of the industrial automation computer program from the computer data storage device and representing the retrieved industrial automation computer program as a corresponding graphical programming language version on a computer display."

The applied portions of Hoskins fail to cure at least these deficiencies of the applied portions of Dole.

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 17. For at least these reasons, Applicant respectfully requests a withdrawal of the rejection of claim 17.

4. Claim 19

Claim 19, from which each of claims 20-35 ultimately depends, recites, *inter alia*, yet no substantial evidence of record has been presented that any of the applied portions of the relied-upon references teach, "converting the identified industrial automation computer program from the internal representation to a markup language version of the industrial automation computer program".

The present Office Action relies upon "col. 7, lines 26-42; Fig. 10; ... col. 16, lines 10-47; Fig. 13" of Dole as allegedly teaching this claimed subject matter.

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Paragraphs 28-46 of Mr. Muenzel's Declaration provide evidence that the applied portions of Dole do not teach, "converting the identified industrial automation computer program from the internal representation to a markup language version of the industrial automation computer program" as claimed by claim 19.

The applied portions of the remaining applied portions of the relied-upon references do not overcome at least these deficiencies of Dole.

Thus, even if there were evidence of obviousness (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), the applied portions of the references relied upon in the Office Action, as **attempted to be modified and/or combined**, still do not expressly or inherently teach every limitation of the independent claims, and consequently fail to establish a *prima facie* case of obviousness. Consequently, for at least the reasons mentioned above, reconsideration and withdrawal of these rejections is respectfully requested.

Moreover, Applicant respectfully submits that the present Office Action fails to properly address the Graham factors by at least failing to determine the scope and contents of the prior art; resolve the level of ordinary skill in the pertinent art; and consider objective evidence indicating obviousness or nonobviousness.

For at least these reasons, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 19. For at least these reasons, Applicant respectfully requests a withdrawal of the rejection of claim 19. A withdrawal of each rejection of each of claims 20-35, each of which ultimately depends from claim 19 is also respectfully requested.

5. Claim 23

Since claim 23 is dependent upon claim 20, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 20, *supra*.

Claim 23 recites, yet the present Office Action **fails to allege** that any of the applied portions of the relied-upon references teaches, "representing the retrieved industrial automation computer program as a corresponding graphical programming language version on a computer display."

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Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 23. For at least these reasons, Applicant respectfully requests a withdrawal of the rejection of claim 23.

6. Claim 36

Claim 36, from which each of claims 37 and 38 ultimately depends, states, *inter alia*, yet no substantial evidence of record has been presented that any of the applied portions of the relied-upon references teach, "causing a programmable logic controller to control an industrial process via execution of an industrial automation computer program developed via a markup language version of the industrial automation computer program, the industrial automation computer program created using a graphical programming language".

Paragraphs 28-46 of Mr. Muenzel's Declaration provide evidence that the applied portions of Dole do not teach, "causing a programmable logic controller to control an industrial process via execution of an industrial automation computer program developed via a markup language version of the industrial automation computer program, the industrial automation computer program created using a graphical programming language" as claimed by claim 36.

The applied portions of the remaining relied upon references do not overcome at least these deficiencies of Dole.

Thus, even if there were evidence of obviousness (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), the applied portions of the references relied upon in the Office Action, **as attempted to be modified and/or combined**, still do not expressly or inherently teach every limitation of the independent claims, and consequently fail to establish a *prima facie* case of obviousness. Consequently, for at least the reasons mentioned above, reconsideration and withdrawal of these rejections is respectfully requested.

Moreover, Applicant respectfully submits that the present Office Action fails to properly address the Graham factors by at least failing to determine the scope and contents of the prior art; resolve the level of ordinary skill in the pertinent art; and consider objective evidence indicating obviousness or nonobviousness.

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For at least these reasons, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 36. For at least these reasons, Applicant respectfully requests a withdrawal of the rejection of claim 36. A withdrawal of each rejection of each of claims 37 and 38, each of which ultimately depends from claim 36, is also respectfully requested.

7. Claim 39

Claim 39 recites, *inter alia*, yet no substantial evidence of record has been presented that any of the applied portions of the relied-upon references teach, **“converting the industrial automation computer program, stored in memory in the internal representation, from the internal representation to a markup language version of the industrial automation computer program”**. The applied portions of the relied-upon references do not teach a **“converting the industrial automation computer program, stored in memory in the internal representation, from the internal representation to a markup language version of the industrial automation computer program”**.

Paragraphs 28-46 of Mr. Muenzel’s Declaration provide evidence that the applied portions of the relied-upon references do not teach, “converting the internal representation to a markup language version of the industrial automation computer program” as claimed by claim 39.

The applied portions of the remaining relied upon references do not overcome at least these deficiencies of Dole.

Thus, even if there were evidence of obviousness (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), the applied portions of the references relied upon in the Office Action, **as attempted to be modified and/or combined**, still do not expressly or inherently teach every limitation of the independent claims, and consequently fail to establish a *prima facie* case of obviousness. Consequently, for at least the reasons mentioned above, reconsideration and withdrawal of these rejections is respectfully requested.

Moreover, Applicant respectfully submits that the present Office Action fails to properly address the Graham factors by at least failing to determine the scope and contents of the prior art;

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resolve the level of ordinary skill in the pertinent art; and consider objective evidence indicating obviousness or nonobviousness.

For at least these reasons, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 39. For at least these reasons, Applicant respectfully requests a withdrawal of the rejection of claim 39. A withdrawal of claim 40, which ultimately depends from claim 39, is also respectfully requested.

8. Claim 41

Claim 41, from which each of claims 42 and 43 ultimately depends, recites, *inter alia*, yet no substantial evidence of record has been presented that any of the applied portions of the relied-upon references teach, “an industrial automation computer program converted from a graphical language version of the industrial automation computer program, the industrial automation computer program adapted for controlling a programmable logic controller”. The present Office Action alleges that this claimed subject matter is taught by Dole at “synthesis tool, behavioral model, schematic – col. 12, lines 5-48; DAG - col. 16, lines 52-55; col. 17, lines 22-27; Fig. 23; step 405-407 - Fig. 9; col. 12, lines 42-55”.

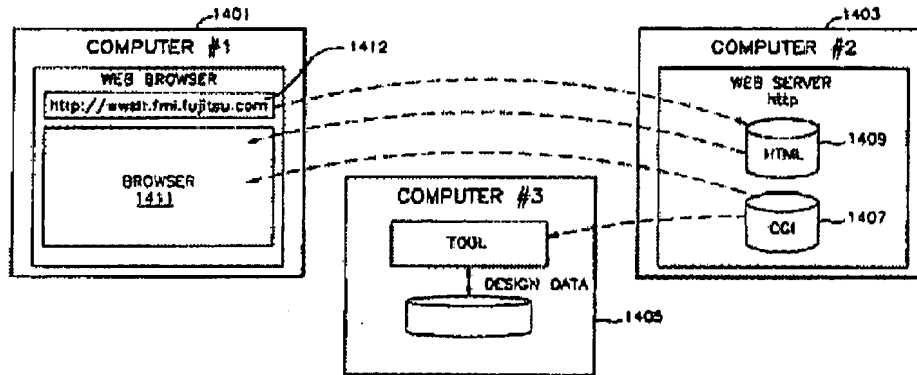
Paragraphs 28-46 of Mr. Muenzel’s Declaration provide evidence that the applied portions of Dole do not teach, “an industrial automation computer program converted from a graphical language version of the industrial automation computer program, the industrial automation computer program adapted for controlling a programmable logic controller” as claimed by claim 41.

Claim 41 recites, “**posting the schema** for access over a network by application developers.”

The present Office Action relies upon “Fig. 5; Fig. 13” as allegedly teaching “**posting the schema** for access over a network by application developers”. FIG. 13 is presented, *supra*, regarding the traversal of claim 1. Dole allegedly illustrates, at FIG 5:

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FIG. 5



Applicant respectfully submits that no substantial evidence of record has been presented that any of these applied portions of Dole teach, “posting the schema for access over a network by application-developers”. The applied portions of the remaining relied upon references do not overcome at least these deficiencies of Dole.

Thus, even if there were evidence of obviousness (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), the applied portions of the references relied upon in the Office Action, as **attempted to be modified and/or combined**, still do not expressly or inherently teach every limitation of the independent claims, and consequently fail to establish a *prima facie* case of obviousness. Consequently, for at least the reasons mentioned above, reconsideration and withdrawal of these rejections is respectfully requested.

Moreover, Applicant respectfully submits that the present Office Action fails to properly address the Graham factors by at least failing to determine the scope and contents of the prior art; resolve the level of ordinary skill in the pertinent art; and consider objective evidence indicating obviousness or nonobviousness.

For at least these reasons, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 41. For at least these reasons, Applicant respectfully requests a withdrawal of the rejection of claim 41. A withdrawal of each rejection of each of claims 42 and 43, each of which ultimately depends from claim 41, is also respectfully requested.

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9. Claim 42

Claim 42 states, yet the present Office Action fails to allege that any applied portion of any relied upon reference teaches, "wherein the schema is an XML schema".

The Office Action appears to improperly group claims together in a common rejection without any showing that the rejection is equally applicable to all claims in the group. That is never appropriate. *See* MPEP 707.07(d). For example, dependent claim 42 states, *inter alia*, "wherein the schema is an XML schema". The omnibus rejection of claim groups by the references relied upon in the Office Action makes no mention of "wherein the schema is an XML schema", and fails to point out where, in any of the references, that limitation is disclosed. In view of the failure of the Office Action to satisfy the requirements of MPEP 707.07(d), the next Office Action should not be final.

For at least these reasons, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 42. For at least these reasons, Applicant respectfully requests a withdrawal of the rejection of claim 42.

10. Claim 44

Claim 44, from which each of claims 45-50 ultimately depends, states, *inter alia*, yet no substantial evidence of record has been presented that any of the applied portions of the relied-upon references teach, "accessing a markup language version of the industrial automation computer program, the markup language version of the industrial automation computer program converted from a representation created using a graphical programming language, the industrial automation computer program adapted for controlling a programmable logic controller".

Paragraphs 28-46 of Mr. Muenzel's Declaration provide evidence that the applied portions of Dole do not teach, "accessing a markup language version of the industrial automation computer program, the markup language version of the industrial automation computer program converted from a representation created using a graphical programming language, the industrial automation computer program adapted for controlling a programmable logic controller" as claimed by claim 44.

The applied portions of the remaining relied upon references do not overcome at least

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these deficiencies of Dole.

Thus, even if there were evidence of obviousness (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), the applied portions of the references relied upon in the Office Action, **as attempted to be modified and/or combined**, still do not expressly or inherently teach every limitation of the independent claims, and consequently fail to establish a *prima facie* case of obviousness. Consequently, for at least the reasons mentioned above, reconsideration and withdrawal of these rejections is respectfully requested.

Moreover, Applicant respectfully submits that the present Office Action fails to properly address the Graham factors by at least failing to determine the scope and contents of the prior art; resolve the level of ordinary skill in the pertinent art; and consider objective evidence indicating obviousness or nonobviousness.

For at least these reasons, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 44. For at least these reasons, Applicant respectfully requests a withdrawal of the rejection of claim 44. A withdrawal of the rejection of each of claims claim 45-50, each of which ultimately depends from claim 44, is also respectfully requested.

11. Claim 46

Claim 46 states, *inter alia*, yet the applied portions of Dole fail to teach, "wherein the step of transmitting the accessed, markup language version of the industrial automation computer program over the network comprises sending an electronic mail message."

The present Office Action takes Official Notice, at Page 14, that:

in an enterprise wherein multiple users are connected via the enterprise network services such that network communication and data distribution help fulfill the enterprise business applications, the use electronic mail to communicate data or update information was a well-known concept at the time the invention was made.

The providing of electronic mail to Dole's system so as to enable multiple developers to communicate with the common framework to retrieve markup-formatted control data would have been obvious in light of the benefits related to

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such type of communications as suggested by the well-known concept from above

Thus, to the extent that Official Notice is utilized to support the rejection of claim 46, this rejection is respectfully traversed and citation and provision of a reference that supports the rejection is respectfully requested.

12. Claim 51

Claim 51 states, yet no substantial evidence is presented that the applied portions of the relied-upon references teach, “a set of tags associated with the markup language version of the industrial automation software defined for a graphical language used in industrial automation, the graphical language associated with the industrial automation computer program, the set of markup language tags one of a plurality of sets of markup language tags, each set of markup language tags of the plurality of sets of markup language tags defined for a corresponding graphical language of a plurality of graphical languages used in industrial automation”.

Instead, the present Office Action apparently fails to properly consider all words of this claimed subject matter. The present Office Action states, at Page 12, “the whole and undecipherable limitation, is treated as though the plurality of tags would each represent a graphical language of some type, e.g. one among more graphical types/ languages”. Applicant respectfully submits that no evidence is presented that the claimed subject matter of claim 51 is “undecipherable”. In addition, no substantial evidence exists that any applied portion of any relied-upon reference teaches, at least, “each set of markup language tags of the plurality of sets of markup language tags defined for a corresponding graphical language of a plurality of graphical languages used in industrial automation”.

Claim 51, from which claim 52 depends, recites, *inter alia*, yet no substantial evidence of record has been presented that any of the applied portions of the relied-upon references teach, “an industrial automation computer program presented in a markup language version, the markup language version of the industrial automation computer program converted from a representation created using a graphical programming language, the industrial automation computer program adapted for controlling a programmable logic controller”.

The present Office Action relies upon “ col. 7, lines 26-42; DTD - col. 16, lines 10-20” of Dole as allegedly teaching this claimed subject matter.

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Paragraphs 28-46 of Mr. Muenzel's Declaration provide evidence that the applied portions of Dole do not teach, "an industrial automation computer program presented in a markup language version, the markup language version of the industrial automation computer program converted from a representation created using a graphical programming language, the industrial automation computer program adapted for controlling a programmable logic controller" as claimed by claim 51.

The applied portions of the remaining applied portions of the relied-upon references do not overcome at least these deficiencies of Dole.

For at least these reasons, Applicant respectfully requests a withdrawal of the rejection of claim 51. A withdrawal the rejection of claim 52, which depends from claim 51, is also respectfully requested.

IV. Claim 53 Comprises Allowable Subject Matter

Claim 53 states, yet no substantial evidence is presented that the applied portions of the relied-upon references teach, "the industrial automation computer program presented in a markup language version, the markup language version of the industrial automation computer program converted from a representation created using a graphical programming language; the industrial automation computer program adapted for controlling the programmable logic controller, a set of markup language tags associated with the markup language version of the industrial automation computer program defined for the graphical programming language, the set of markup language tags one of a plurality of sets of markup language tags, each set of markup language tags of the plurality of sets of markup language tags defined for a corresponding graphical language of a plurality of graphical languages used in industrial automation".

For at least these reasons, a Notice of Allowance is earnestly solicited regarding claim 53.

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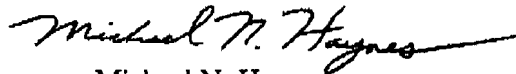
CONCLUSION

It is respectfully submitted that the application is in clear condition for allowance. Reconsideration, withdrawal of all grounds of rejection, and issuance of a Notice of Allowance are earnestly solicited.

The Office is hereby authorized to charge any additional fees or credit any overpayments under 37 C.F.R. 1.16 or 1.17 to Deposit Account 50-2504. The Examiner is invited to contact the undersigned at 434-972-9988 to discuss any matter regarding this application.

Respectfully submitted,

Michael Haynes PLC



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Date: 30 October 2007

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